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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,749	09/19/2003	Robert Leah	5577-281	6984

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EXAMINER
TERMANINI, SAMIR

ART UNIT	PAPER NUMBER
2179	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/665,749	LEAH ET AL.
	Examiner	Art Unit	
	Samir Termanini	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date *5/9/2005;3/17/2005,* 2/11/05; 3/5/04

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Specification

1.   The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (see page 4, line 3, of the specification of the instant application). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Drawings

2.   The drawings are objected to because Fig. 3 shows element 260 to be a "tree map" where the specification specifies element 260 to be a "tree map module." Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Observations

3.   The examiner notes that the term "highlighting" recited in Claims 6-7 has

been reasonably interpreted to mean: the controlling of a respective bounding box by

prominently increasing it <u>or</u> decreasing the color saturation (*see* page 7, lines 13-20, of

the specification of the instant application).

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office

action:

> (e) the invention was described in (1) an application for
> patent, published under section 122(b), by another filed in the
> United States before the invention by the applicant for patent or
> (2) a patent granted on an application for patent by another filed
> in the United States before the invention by the applicant for
> patent, except that an international application filed under the
> treaty defined in section 351(a) shall have the effects for
> purposes of this subsection of an application filed in the United
> States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the
> English language.

5.   Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by

Wattenberg et al. (US 6,583,794 B1).

6.   As to independent **Claim 1**, *Wattenberg et al.* teach a method of

displaying data from a data set as a tree map visualization (*See* Figs. 2B through 4,)

comprising: Identifying data elements in the data set to be highlighted (identifying: "to

indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54, e.g. stock price

changes, see col. 3, lines 40 - 60) and generating a tree map visualization (*see* Figs. 2B

through 4) based on the data set where a location of bounding boxes corresponding to

the identified data elements have greater color saturation in comparison to other

bounding boxes ("to graphically convey to the user," *see* col. 3, lines 35 – 36, e.g. lighter

shading for positive stock price change, *see* col. 3, lines 40 – 60; *See also* discussion about using multiple shades of <u>one</u> color in col. 3 at lines 49-54, *see also* col. 17, lines 36-40, "…one color indicating…changes…").

As to independent **Claim 8**, *Wattenberg et al.* teach a tree map visualization displayed on a display device (display screen 20), comprising: a plurality of bounding boxes ("…treemap comprises a space that is divided into multiple rectangular regions…" *see* col. 2 lines 12-15), each bounding box having a color associated therewith ("through the of…color…" col.3, lines 34-37), the color being based on a data value associated with a corresponding bounding box; (e.g. "…the color corresponds to its recent performance…" col.3, lines 40-44) and at least one bounding box having a color saturation greater than a color saturation of another of the plurality of bounding boxes that has the same color as the at least one bounding box so as to highlight the at least one bounding box ("[u]tilizing multiple shades of green [to indicate] price changes" results in greater saturation of another bounding box whenever there is a difference in price change, *see* col. 3, lines 47 – 54; *see also* e.g. Fig. 2B showing differences).

As to independent **Claim 11**, W*attenberg et al.* teach a system for displaying data from a data set as a tree map visualization, comprising: means for identifying data elements in the data set to be highlighted (i.e. the bounding box can be highlighted by statically defining its name, *see* col. 16, lines 18-29; identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54); and means for generating a tree map visualization based on the data set where a location of bounding boxes corresponding to the identified data elements have greater color saturation in comparison to other bounding boxes. (e.g. lighter or darker shading for positive or negative stock price change, *see* col. 3, lines 40 – 60; *See also* discussion about using multiple shades of <u>one</u> color in col. 3 at lines 49-54, *see also* col. 17, lines 36-40, "…one color

indicating…changes…"; Note that generating means "to graphically convey to the user,"
see col. 3, lines 35 – 36).

As to independent **Claim 12**, this Claim differs from Claim 1 only in that claim 1 is
a method claim whereas claim 12 is an apparatus claim. Thus, this claim is analyzed as
previously discussed with respect to claim 1 above.

As to dependent **Claims 2**, *Wattenberg et al.* further teach increasing the color
saturation of bounding boxes of identified elements (darker shading, *see* col. 3, lines 47
– 49).

As to dependent **Claims 3**, *Wattenberg et al.* further teach decreasing color
saturation of bounding boxes of elements that are not identified (lighter shading, see col.
3, lines 47 – 49; *See also* col. 16, lines 19–23, ability to modify color scheme; *see also*
col. 10, lines 10–22, using black for a neutral performance).

As to dependent **Claim 4**, *Wattenberg et al.* further teach identifying data
elements in the data set to be highlighted by identifying data elements (identifying: "to
indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54) based on a data
value of the data elements that is not utilized in generating the tree map ("…value used
to determine color of each region [is based on] any other criteria…, *see* col. 15, lines 20-
29).

As to dependent **Claim 5**, *Wattenberg et al.* further teach identifying data
elements in the data set to be highlighted by identifying data elements based on
metadata associated with the data elements. (identifying: "to indicate", "utilizing", and
"refer to", e.g. col. 3, lines 45, 48, 52, and 54 ;e.g. performance value "…used to
determine color of each region…," *See* col. 15, lines 19-21).

As to dependent **Claim 6**, *Wattenberg et al.* further teach identifying data
elements in the data set to be highlighted is based on a dynamically determined criteria

(identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54 ;e.g. stock price, see col. 10, lines 17-21; e.g. patient conditions, see col. 17, lines 61-64; e.g. change in sales, see col. 17, lines 61-64; e.g. performance of students, see col. 18, lines 9-14).

As to dependent **Claim 7**, Wattenberg et al. further teach identifying data elements in the data set to be highlighted is based on a statically defined criteria (identifying: "to indicate", "utilizing", and "refer to", e.g. col. 3, lines 45, 48, 52, and 54; i.e. the bounding box can be highlighted by statically defining its name, see col. 16, lines 18-29).

As to dependent **Claim 9**, Wattenberg et al. further teach at least one bounding box corresponding to a predefined element of a data set used to generate the tree map visualization ("In one embodiment, the size of a region corresponds to the market capitalization of the company represented by that region and the color corresponds to its recent performance from a predetermined date." see col. 3, lines 40-44).

As to dependent **Claim 10**, Wattenberg et al. further teach at least one bounding box corresponding to an element of a data set used to generate the tree map visualization that is dynamically selected ("change since" control 906) based on data associated with the element that is not used to generate a size or color of a bounding box of the tree map visualization. (e.g. user-selected periods of time, col. 16, lines 22-25).

Conclusion

The following prior art is made of record and, while not relied upon, is considered pertinent to applicant's disclosure:

[1]   Ben Shneiderman, Treemaps for space-constrained visualization of hierarchies, http://www.cs.umd.edu/hcil/treemap-history/index.shtml, (1998-2006).

[2]   Smith et al. (2004/0263513 A1) for teaching a treemap engine.

[3]   Bauernschmidt et al. (US 2004/0168115) for teaching user defined
        treemap reports.
[4]   *Baker et al.* (US 5581797 A), *inter alia*, for teaching treemap highlighting
        and zooming.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Samir Termanini whose telephone number is (571) 270-

1047. The examiner can normally be reached on 9AM - 4PM, Monday-Friday

(alternating Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ST/   Samir Termanini
                                                    Patent Examiner
                                                    Art Unit 2179

                                                    CHANH D. NGUYEN
                                                    SUPERVISORY PATENT EXAMINER